

# Developing Leaders: The Role of Neuroscience

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Presented by:



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# Presentation

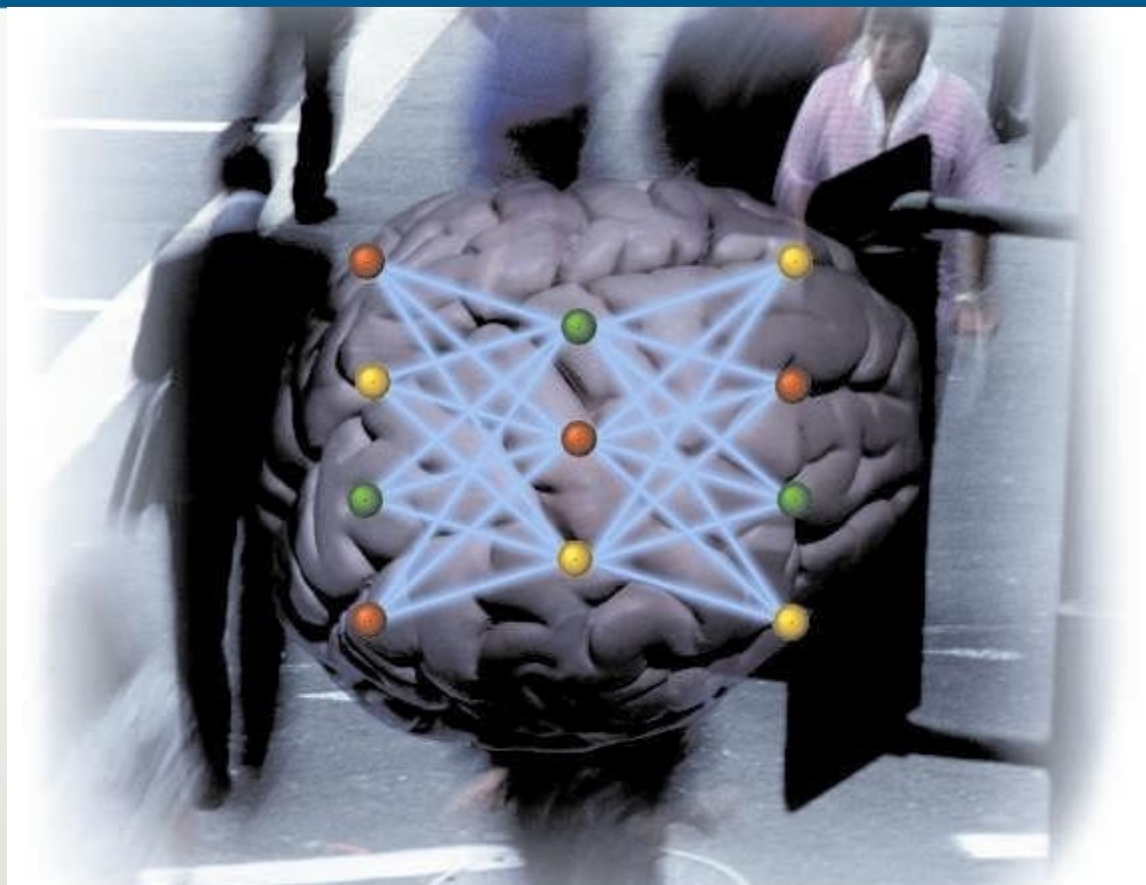


## Topic: Brain Science

☐ The New Stuff

☐ Role of Neuroscience in Leadership

☐ How to Use Neuroscience when  
Developing  
Leaders

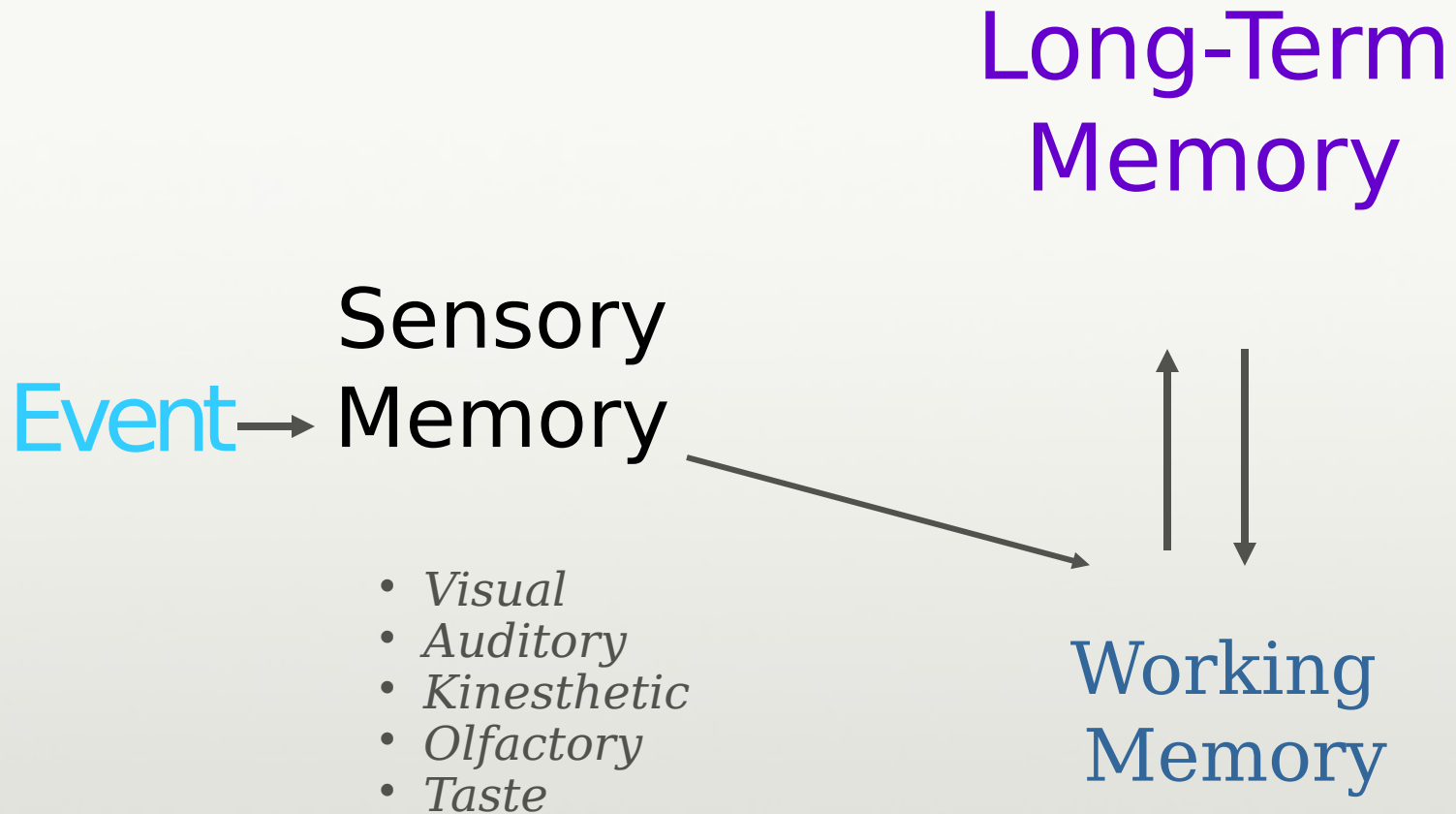


Weighing about 3 pounds (1.4 kilograms), the brain consists of three main structures: the cerebrum , the cerebellum and the brainstem .

- The Brain is dynamic and can be remapped
- Schema's in the brain seek efficiency



- Understanding the brain can help develop leadership



This does not imply that Leadership — is a science. There is a great deal of art and craft in it. But several conclusions about Leadership can be drawn that make the art and craft far more effective. These conclusions would have been considered counterintuitive or downright wrong only a few years ago.

- **Change is pain.**
- **Behaviorism doesn't work.**
- **Humanism is overrated.**
- **Focus is power.**
- **Expectation shapes reality.**
- **Brain Connections are better when they are self-generated.**

**The Neuroscience of Leadership**  
**by David Rock and Jeffrey Schwartz**

- Organizational change is unexpectedly difficult because it provokes sensations of physiological discomfort.
  - The Brain seeks efficient use of schema
  - Role of Metacognition
  - Example: Driving in Australia



- Change efforts based on incentive and threat (the carrot and the stick) rarely succeed in the long run.
  - Meaning will be applied...
  - Example: Teen Agers

- In practice, the conventional empathic approach of connection and persuasion doesn't sufficiently engage people.
  - Social Animals
  - The Group Hug?

- The act of paying attention creates chemical and physical changes in the brain.
  - the mental act of focusing attention stabilizes the associated brain circuits.
  - Practice with Purpose: The magical 10,000
    - X-Rays
    - Tiger Woods

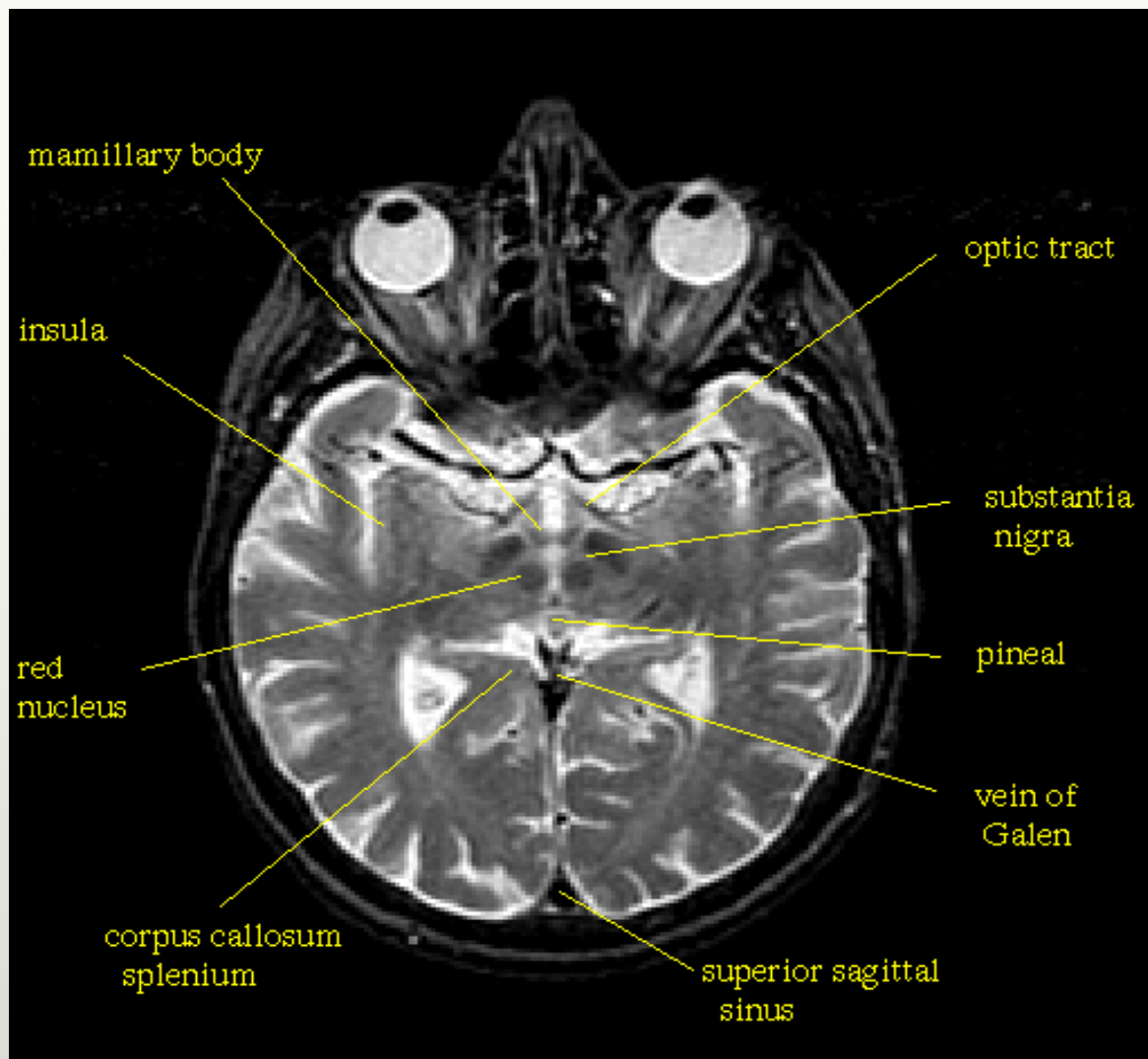
- People's preconceptions have a significant impact on what they perceive.
  - Role of Vision
  - Mental Maps are Strong!
  - Example: Tractor Roll-Over Exercise

- Repeated, purposeful, and focused attention can lead to long-lasting personal evolution.
  - Tasks that lead to individuals using knowledge and skills are critical for learning
  - Debrief time is important

- (1) make leader knowledge-construction activities overt
- (2) maintain attention to what leadership competency are being developed
- (3) treat knowledge gaps in a positive way
- (4) provide process-relevant feedback
- (5) encourage learning strategies other than rehearsal (Upset the Schema)
- (6) encourage multiple passes through information
- (7) support varied ways for people to organize their knowledge
- (8) encourage maximum use and examination of **existing** knowledge
- (9) provide opportunities for reflectivity and individual learning styles
- (10) facilitate transfer of knowledge across contexts (Use the prefrontal cortex)
- (11) give more responsibility for contributing to each other's learning

- Differences:
  - Gender
  - Generations
  - Culture
- Role of Emotion
- Critical are the Vast and Varied Experiences

## A way to view your people?





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